WATER ALLOCATION PROGRAM DEVELOPMENT
Meeting Proceedings
Thursday, June 26, 2003
9:00AM-11:00AM
Narragansett Bay Commission
One Service Road, Providence, RI 02908

I. WELCOME

Mr. Dan Varin, Water Resources Board Chair, welcomed participants. He thanked Juan Mariscal and the Narragansett Bay Commission for making the meeting space available. He referenced a chart that was distributed summarizing current work products emerging from the committees. He noted that although it varies from one committee to another, the Water Resources Board is concerned with two aspects-process and the qualitative aspects of the work rather than the numbers, data and quantitative aspects. The Board is looking for the process to produce qualitative guidance that will complement quantitative efforts underway by the Board (basin studies, modeling studies, supplemental water, etc.).

Mr. Varin stated that two committees would report today; Priority Uses, briefly, followed by an in depth presentation by the Impact Committee. Mr. Combs, Chair of the Priority Uses Committee, stated that he had met with the Chair, General Manager and Supervising Planner and that they had discussed Board direction and context. He stated that the meeting was helpful and that minutes of the meeting can be shared with the group. He stated that the Priority Uses Committee has developed recommendations, which they have distributed to committee members for input. They will also distribute their recommendations to the full WAPAC for review, comment and discussion.

II. IMPACT COMMITTEE PRESENTATION (Outline and slide presentation attached)

Mr. Varin introduced the first agenda item- a presentation by the Impact Committee, Beth Collins and Julie Lundgren. Ms. Collins stated that this was a first report and that they were still working hard as a committee to review all the issues. Today offers an opportunity for the full group to share in those discussions.

Summary of Presentation

The Impact Committee has focused their attention understanding the system of interactions between water supply, land development, the environment and the wealth and well-being of Rhode Islanders- asking how the system can be managed to maximize the positive impacts. They learned that the implicit goals vary so widely from region to region that one "model" of analysis did not fit. In conducting research, there has been no single model or method for assessing impact and values that can be applied. Why do we care about water quantity? In Rhode Island, assessing and managing water quantity will help increase community well-being, reduce the frequency and severity of water scarcity, provide more water for our ecosystems, more habitat with hydrology closer to natural conditions, and preserve economic diversity. What is more common in the literature in general is the goal of maximizing growth, which is not a goal that appears in Rhode Island. There are studies that try to justify buying water rights from agricultural users to serve 'higher value' uses. In Rhode Island, agriculture promotes the goal of preserving economic diversity, and in this sense is a "higher" value use.

Water resources are part of a complex system. Some of the first assumptions one might make do not necessarily hold true. For example, the understanding that whether the focus is on conserving water or not, if we do not do some of the other things, we could still find ourselves in a situation with increasingly intolerable environmental impacts. If we focus on water conservation and don't do land use management and don't draw the line on environmental impacts we could find ourselves in a situation where we reach the same problems later and at a higher level of population. The most important step we can take is to draw the line on environmental impact. Issues that other committees are exploring as part of this effort include:

- Minimum stream flow standard
- Minimum wetland regulation
- Designation of priority habitats for conservation

Designating priority habitats is important because it is unrealistic to have the same streamflow standard everywhere. We may want to get ahead of the curve and consider economic as well as environmental interests. For example, streamflow in a segment of the river that preserves canoeing even though we may not be able to develop a precise economic value to the advantage of having active recreation in our waterways. Healthy watersheds, particularly wetlands, have economic value. The values are difficult to quantify but assist in adding environmental health to the equation. The City of new York provided a case example of quantifying the cost of a new filtration plant versus environmental management of the ecosystem as "filter" (land acquisition, best management practices, etc.). Ms. Collins summarized environmental impacts and applied methodology developed in the Boston area to Rhode Island. For the 96,000 acres of land developed in Rhode Island we've lost the ability to serve between 450,000 and 600,000 residents (25% to 60% of the current population) in terms of overall reduction in water supply during this period of rapid land development. Fortunately, there is no one to one relationship between population growth and demand and there are many design and technology choices available to us that can change the equation. The committee intends to discuss those tradeoffs and choices in the written report.

Ms. Julie Lundgren reviewed the work of a subgroup of the committee charged with identifying priority habitats in the two pilot basins-the Wood-Pawcatuck and the Blackstone. Rhode Island has some amazing natural resources in the state. The goal is to guide use now to prevent degradation of these valuable natural assets. It was difficult to pick priorities. In the Blackstone, the main branch of the Blackstone River and headwater streams were identified. The Pawcatuck watershed holds an enormous percent of the natural diversity of Rhode Island. The Nature Conservancy has been doing regional analysis of aquatic resources. While that data is not available yet, some of the information has been used as input into the process and will appear in the report. In various analyses the Pawcatuck was found to be one of the most intact watersheds in terms of forest cover, fewer roads than many places, less impacts from agriculture and development compared to many of the watersheds across lower New England. An astounding finding given that Rhode Island is so densely developed. The whole area as a result was of interest. The Queen River and the Wood River headwaters were identified as very high quality systems. Streams and riparian systems were evaluated from many different angles. Large wetlands systems with streams like the Great Swamp were also identified. Streamflows, water quality and importance of the forest

landscape were identified as key concerns. The hope is to produce a method that can be replicated in other watersheds for establishing priority habitats and protection strategies.

A second priority is land use planning. In planning what needs to be done, barriers include technical expertise, and what is the mechanism that is going to bring communities together to plan in relation to water resources.

Third, the ability to reduce demand when water is scarce is an important part of the system to avoid adverse impacts on both businesses and the environment. While we have a variety of tools available, the committee suggests expanding the toolbox to include flexible pricing to pre-authorize suppliers to adjust pricing when needed, conservation contracts and mitigation to provide financial incentives to reduce water use. An example would be grants to agriculture that assist with the purchase of technology that uses less water. Some of the options would require regulatory changes and many would require technical assistance.

There are places with higher prices and stricter water conservation measures in place that are growing despite them. Rhode Island has latitude to take the right steps without impacting the economy or even slowing growth. We have a lot of water in Rhode Island. We should be able to manage it not only to minimize scarcity but to make water abundant so that we can in the next ten, twenty, fifty or hundred years still continue to allow the developments that uses water, including large water users. The key is to make sure we don't squander our water on things that aren't important or efficient so that we have enough for the things that really matter. In establishing good management of the resources, we have to be careful not to let all the little/incremental development happen and turn down the big development. The biggest threat to economic development and prosperity is not being too bold in water management. The biggest threat would be to not manage water resources progressively and let scarcity take us by surprise. Instability, uncertainty and regulatory difficulties are higher business costs to pay than addressing the issues comprehensively up front. Water resources need to be predictable over long-term horizons. Choices and alternatives should be maximized. Quality of place is one of the most important competitive advantages in Rhode Island. Preserving the natural and aesthetic qualities of the state as well as the predictability of water supply is crucial. Economic Policy Council Goals for economic development and prosperity related to the discussion include:

- Increasing prosperity, not population
- Increase jobs and commercial tax base in cities. Build on Providence's assets as a hub of creativity.
- Grow high & middle wage jobs.
- Invest in the research infrastructure at URI
- Enhance quality of place, build on community character: urban, town, and village centers; rural landscapes
- Promote sustainable use of Narragansett Bay
- Preserve the Pawcatuck Borderlands as an unfragmented forest system in perpetuity.

Preliminary committee recommendations include:

- Move away from "prove it" method
- Have a state priority process for natural resources including habitats, wetlands, and waterways

- Stream flow standards for all streams, but a higher standard for priority areas
- Specific triggers for action
- Designation of authority that extends to all users including self-supply
- State level leadership
- Uniform build-out analysis with municipalities as partners
- Extensive technical assistance to communities to understand implications of basin studies and build-out (including evaluation of alternative zoning and regulatory scenarios)
- Authority and process to establish standards, priorities, triggers and responses
- Demand-side technical assistance (like electric)

- New resources
  - It is best to support water management programs through user fees
  - Water pricing (all costs are per unit consumed)
  - Development impact fees (let the meter measure impact on demand)
  - Consider charging management fees to all sewered customers

Discussion

Mr. Brian Bishop stated that it is important to tailor development to maximize economic value. He also stated that cost for the base resource (fundamental to pricing strategies) is missing in the pricing of water. Choice is disconnected from the cost. In addition, there is instability in the legal regime particularly in relation to groundwater. It is important to assess correlative models-to loosen regulations that may have outlawed doing the right thing.

Mr. Dan Varin noted that the 96,000 acres developed over a quarter century equals roughly 15% of the state –a trend that cannot be repeated very often. Much of the land development has been housing, specifically large lot housing. Alternatives are reduced. There are fewer choices. A continuation of this pattern could contribute to outdoing ourselves in the next 30 years in terms of the rate of the land absorption. Mr. Henry Meyer added that the population has not changed that much in relation to the amount of land developed. The patterns reflect lifestyle issues and choices. Solutions will require lifestyle changes. Where do people live and work? Rain still falls but run-off patterns have changed affecting both the quantity and quality of water resources.

There was discussion about the lack of funding for stream gages and the need for long term funding support. Federal dollars are temporarily covering the cost of the eight gages that RIDEM cannot fund this year. It was suggested that water users pay for pay for water data and management. Providence billed surcharge rates up to 8% of investments. The revenue is used to support non-water related activities. There was discussion about restricted receipt accounts versus surcharge funds collected and deposited into the general fund. There was also discussion of the Providence model, which would keep surcharge money in the system. There was a suggestion that funding was best left at the local level through the Water Resources Board (WRB) or the Public Utilities Commission (PUC) with small amounts for statewide purposes.

Successful local initiatives were mentioned such as the Westerly water fund, which was used to purchase a beach. The group also discussed the need for funding to accommodate future

demand, develop new resources, identify areas for new municipal wells and implement local conservation and well protection strategies.

Ms. Elizabeth Scott complimented the presentation and suggested expanding the analysis. Potential lawsuits can be avoided through proactive management. Klamath, Ore worked with the US Department of the Interior to avoid lawsuits such as those in Waterbury, Connecticut. How does new source development compare to the cost of conservation? There may be ways to avoid the need to develop new sources through comprehensive conservation measures such as low flow toilets.

Mr. Harold Ward stated that issues in the Pawcatuck watershed include large lot residential development, self-supply and residential sprinkler systems. Research by Brown students has shown significant amount of water used for residential automatic irrigation. Automatic sprinklers add a factor of ten to the water used domestically. Reducing the size of the lawn and number of automatic sprinklers would conserve a considerable amount of water for other uses. He also emphasized that it is important to recognize the impact of limiting use on agriculture, and economic development. Discussion continued about modeling management scenarios and impacts on existing and future water users.

Water pricing studies suggest that businesses are better off using pricing to achieve necessary measures during drought rather than business interruptions. In addition, Eastern customers are more responsive to pricing strategies. It is a question of cost versus risk and the key is to balance the cost and certainty. Quality of place is the frosting on the cake and part of the cost of doing business.
Under the current system, there is a large amount of uncertainty. Businesses (existing and new) need stability and predictability. Given the relatively high cost of doing business in New England, how far can we go before we reach the level of disincentive economically?

There were questions about control and whether control should rest with the government. It was noted that water companies are governmental in nature. Rhode Island is in a state of transition where the public supply system has grown in size and geography three times in the last thirty years.

Respectfully Submitted,

Kathleen Crawley
Staff Director

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